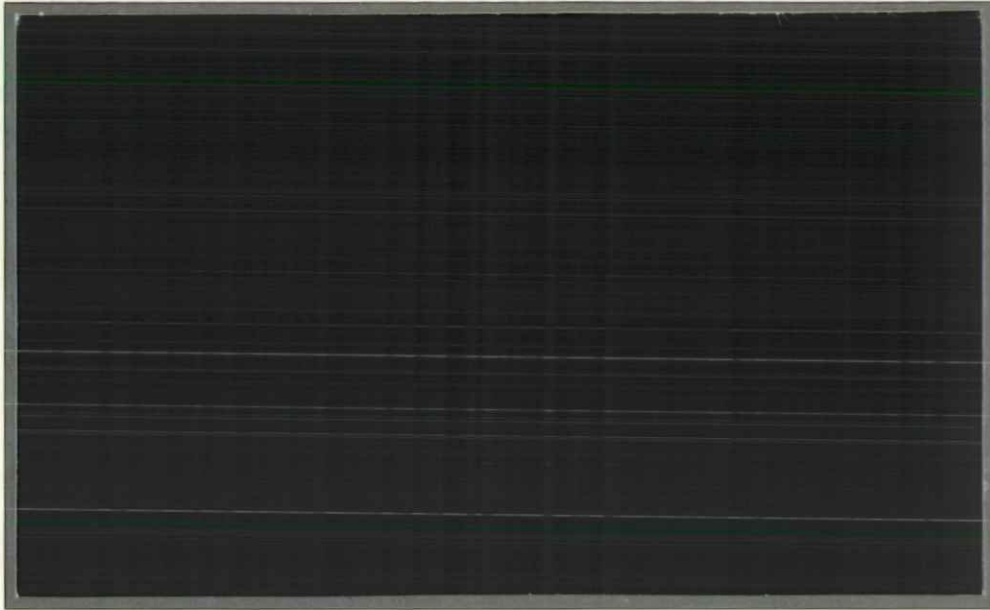




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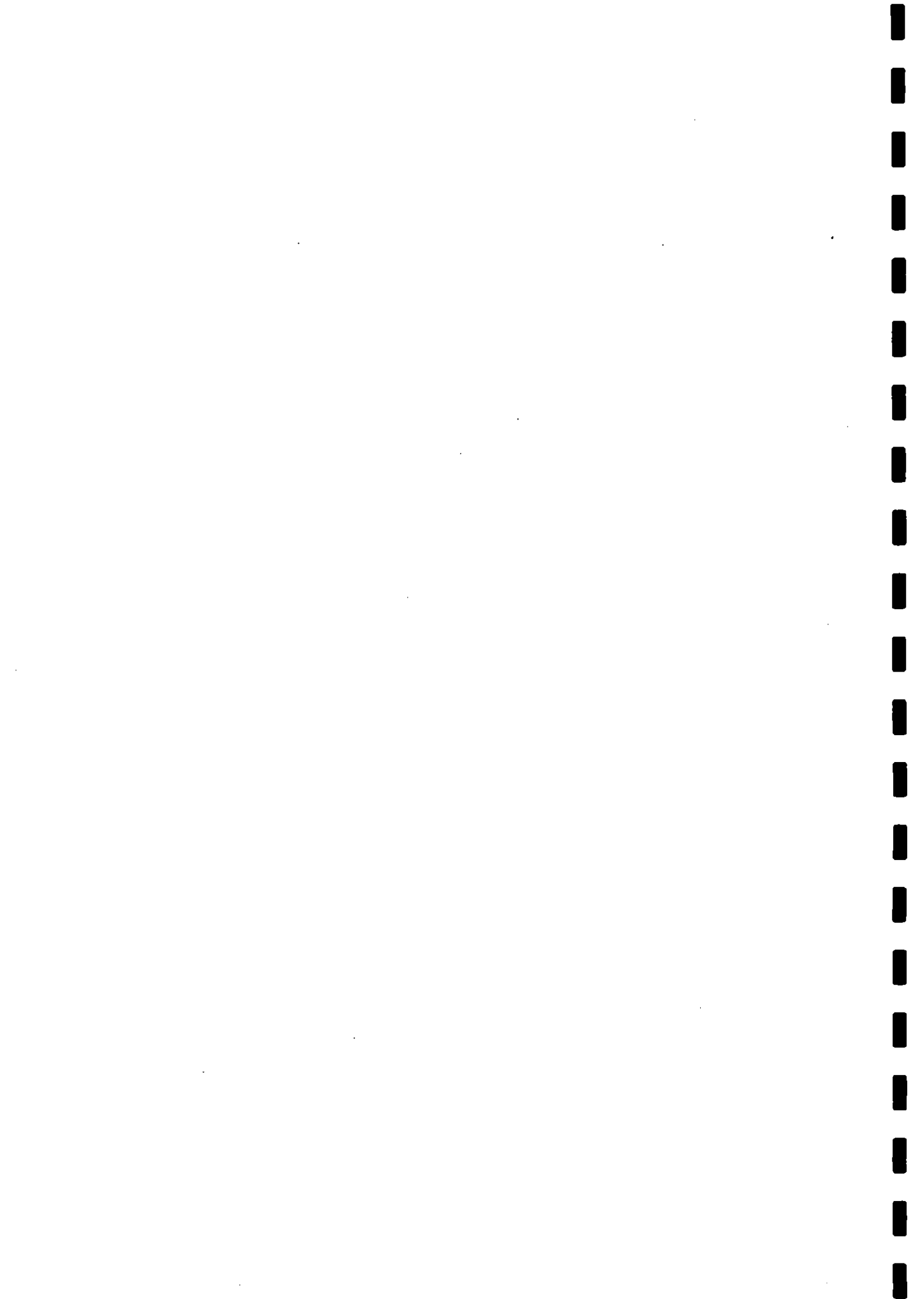
The macroinvertebrate fauna of the
River Spey, Scotland. 1978-79

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INSTITUTE OF FRESHWATER ECOLOGY

The Macroinvertebrate Fauna of the River Spey

The Data-Base

Information is presented for nine sites on the R. Spey. No data are available for tributaries.

Sampling was undertaken by Dr R. Owen of North-East River Purification Board in summer and autumn 1978 and spring 1979, using the procedures recommended for the River Communities Project (RCP). Sample processing and identification of the macroinvertebrate fauna was carried out by members of the RCP team at the River Laboratory, Wareham, Dorset.

The results are given as

- i) A site x species matrix which displays the occurrence of each taxon in spring, summer and autumn at each site in sequence downstream (0 = absent and + = present).
- ii) A series of pages which list the taxa recorded at each site.
- iii) A sheet which gives Biological Monitoring Working Party indices (Score, number of scoring taxa and Average Score per Taxon) for each site in each season and for the three seasons combined.

Although the taxon list is substantial, it does not represent a full listing, either for individual sites, or for the river as a whole. Ideally, a greater separation of the spring and summer dates would have been preferable and might have resulted in the capture of some additional species. Identification of some difficult groups and in particular the Diptera frequently stops short of species identification.

Note that of the nine sites listed, all but one (Kincraig) are incorporated into the current version of RIVPACS (River Invertebrate Prediction and Classification System) which is based on 438 sites on almost 80 rivers throughout Great Britain. The Kincraig site, which was just downstream of Loch Insh, had an unusual combination of taxa, including both lotic and lentic species and in consequence, always appeared as an isolated outlier in early classifications. Hence, despite its high conservation interest, which is fully recognised, it was necessary to exclude Kincraig from RIVPACS to ensure that it did not introduce anomalies into the prediction system.

The Fauna

The site x species matrix lists a total of 17⁶ different taxa which belong to the following major taxonomic groups:

R. Spey (9 sites)

Taxa recorded
at Kincaig only

Tricladida	- 1	-
Gastropoda	- 3	-
Bivalvia	- 5	2
Oligochaeta	-20	4
Hirudinea	- 2	1
Hydracarina	- 7	2
Ephemeroptera	-18	4
Plecoptera	-19	2
Hemiptera	- 5	5
Coleoptera	-12	4
Megaloptera	- 1	-
Trichoptera	-32	8
Diptera	-51	11
TOTALS	176	43

Of the 176 taxa, 43 were recorded at Kincaig only. Many of these 43 taxa are characteristic of, and indeed common in, standing and slow-flowing waters, but some were recorded infrequently during the 438 site survey of British rivers because of their association with lentic conditions.

Detailed examination of the 176 taxa from the nine sites indicates that the fauna does not include any extreme rareties. Nevertheless the river supports a diverse assemblage of Ephemeroptera, Plecoptera, Trichoptera and Diptera. Further brief comments on some elements of the fauna are given below.

Bivalvia: *Pisidium pulchellum* [Recorded at 11 (2.5%) of the 438 sites in the IFE data-base]. [Note that although *Margaritifera margaritifera* (L.) was not recorded during the survey, it does occur in the R. Spey].

Oligochaeta: Included two infrequent members of the Naididae, which are probably under-recorded. They are *Specaria josinae* [recorded at 7 (1.6%) of the 438 sites] and *Vejdovskyella comata* [at 8 (1.8%) of the 438 sites].

Crustacea: No records.

Ephemeroptera: 18 species, but no rareties. Several of the species at Kincaig probably owe their occurrence to the presence of Loch Insh upstream.

Plecoptera: 19 species, but no rareties. However, the occurrence of *Brachyptera putata* may be worth highlighting since it is apparently confined to Britain. [Recorded at 10 (2.3%) of the 438 sites].

Odonata: No records.

Hemiptera: 5 species, all confined to the Kincaig site and no rareties.

Coleoptera: *Coelambus novemlineatus*, recorded at the Kincaig site, is a nationally notable water beetle (Nb) which is characteristic of Scottish lochs.

Trichoptera: 32 taxa of which 8 were confined to Kincaig but no rareties.

Diptera: 51 taxa of which 11 were confined to Kincaig.

SITE x SPECIES MATRIX FOR THE RIVER SPEY. 1978-79.

01	R.Spey	Garva Bridge	(NN 522 947)	07 MAY 1979	05 JUN 1978	11 OCT 1978
03	R.Spey	Laggan Bridge	(NN 614 943)	07 MAY 1979	05 JUN 1978	11 OCT 1978
05	R.Spey	Newtonmore	(NN 708 980)	07 MAY 1979	05 JUN 1978	11 OCT 1978
07	R.Spey	Kincraig	(NH 838 062)	07 MAY 1979	05 JUN 1978	11 OCT 1978
09	R.Spey	Boat of Garten	(NH 946 188)	07 MAY 1979	06 JUN 1978	11 OCT 1978
11	R.Spey	Grantown	(NJ 038 264)	07 MAY 1979	06 JUN 1978	11 OCT 1978
13	R.Spey	Narypark	(NJ 183 388)	07 MAY 1979	09 AUG 1979	11 OCT 1978
15	R.Spey	Craigellachie	(NJ 283 452)	08 MAY 1979	09 AUG 1979	11 OCT 1978
17	R.Spey	Garmouth	(NJ 343 610)	08 MAY 1979	06 JUN 1978	11 OCT 1978

SPECIES CODE AND NAME

	01	03	05	07	09	11	13	15	17
03120203 Polycelis felina	000	000	000	000	+++	0++	0+0	000	0+0
13040301 Potamopyrgus jenkinsi	000	000	000	000	000	000	00+	000	000
13070107 Lymnaea peregra	00+	00+	000	000	+++	0++	00+	000	0+0
13100201 Ancylus fluviatilis	000	00+	000	000	+0+	+++	000	000	0+0
14030000 Sphaeriidae	000	00+	000	000	000	000	000	000	000
14030200 Pisidium sp.	000	0+0	00+	00+	00+	+0+	0+0	000	000
14030202 Pisidium casertanum	+00	+00	000	000	0+0	000	000	000	000
14030206 Pisidium milium	000	000	000	+00	000	000	000	000	000
14030208 Pisidium subtruncatum	000	000	000	+00	000	000	000	000	000
14030213 Pisidium nitidum	000	+00	000	+00	000	000	000	000	000
14030214 Pisidium pulchellum	000	000	000	000	+00	000	000	000	000
16020000 Naididae	0+0	000	000	000	000	000	000	000	000
16020401 Specaria josinae	000	000	000	0++	000	000	000	000	000
16020501 Uncinaxis uncinata	000	000	000	000	000	000	0++	000	000
16020601 Ophidonais serpentina	000	000	000	0+0	000	000	000	000	000
16020701 Nais communis group	000	000	000	0++	00+	000	00+	00+	00+
16020703 Nais simplex group	000	000	000	+00	000	000	000	000	000
16020704 Nais alpina	00+	0++	0++	000	+++	0++	0++	0++	00+
16020707 Nais elinguis	000	000	000	000	000	000	00+	000	000
16020710 Nais pardalis	000	000	000	000	0++	0++	000	000	000
16020901 Vejvodskyella comata	000	0+0	000	+00	000	000	000	000	000
16021201 Stylaria lacustris	000	000	000	+00	000	000	000	000	000
16021602 Pristina idreensis group	000	000	000	000	000	000	00+	000	00+
16030000 Tubificidae	000	000	+00	000	000	000	000	00+	000
16030103 Tubifex ignotus	000	000	000	+++	+0+	000	000	000	000
16030302 Limnodrilus hoffmeisteri	000	000	000	0+0	000	000	0+0	000	000
16030401 Spirosperma ferox	000	0+0	000	000	+00	0+0	000	0+0	000
16030601 Rhyacodrilus coccineus	0+0	+00	000	000	000	000	+00	+00	000
16031101 Aulodrilus pluriset	000	000	000	+++	00+	000	00+	0+0	000
16040000 Enchytraeus group	+++	+++	+0+	+00	+++	+++	+++	+++	+++
16060101 Lumbriculus variegatus	000	00+	00+	+++	0++	+++	00+	000	000
16060201 Stylodrilus heringianus	+++	+0+	0+0	00+	+00	+00	+++	+00	+00
16080000 Lumbricidae	0++	+00	00+	000	+++	+0+	000	000	0+0
17020302 Glossiphonia complanata	000	000	000	0+0	000	+00	000	000	000
17020501 Helobdella stagnalis	000	000	000	00+	000	000	000	000	000
19040105 Eylais discreta	000	000	000	0+0	000	000	000	000	000
19080201 Sperchon brevirostris	000	000	000	000	000	000	0++	000	00+

SITE x SPECIES MATRIX FOR THE RIVER SPEY, 1978-79. (CONT.)

SPECIES CODE AND NAME	01	03	05	07	09	11	13	15	17
19080204 <i>Sperchon glandulosus</i>	000	000	000	000	000	000	000	000	00+
19110204 <i>Lebertia (Pilelebertia) inaequalis</i>	000	000	0+0	000	000	000	000	000	000
19110209 <i>Lebertia (Pilelebertia) porosa?</i>	000	000	000	00+	+00	000	000	0+0	000
19140307 <i>Atractides (Atractides) nodipalpis</i>	000	000	000	000	00+	000	000	000	00+
19240213 <i>Arrenurus (Megalaracarus) securiformis</i>	000	000	000	00+	000	000	000	000	000
30010102 <i>Siphonurus lacustris</i>	000	000	000	+00	000	000	000	000	000
30010201 <i>Ameletus inopinatus</i>	000	000	000	000	000	000	+00	000	000
30020102 <i>Baetis scambus</i> group	000	000	0+0	000	0+0	0++	0+0	000	0++
30020103 <i>Baetis vernus</i>	000	000	000	000	0+0	0+0	000	000	000
30020105 <i>Baetis rhodani</i>	0+0	+++	+++	000	+++	+++	+++	+++	+++
30020107 <i>Baetis muticus</i>	000	0+0	+00	000	+++	0++	+0+	+00	+00
30020108 <i>Baetis niger</i>	000	00+	000	000	000	000	000	000	000
30020201 <i>Centroptilum luteolum</i>	000	000	000	+++	+00	000	000	000	000
30020302 <i>Cloeon simile</i>	000	000	000	00+	000	000	000	000	000
30030101 <i>Rhithrogena semicolorata</i> group	+++	+++	+++	000	+++	+0+	+++	+++	+++
30030201 <i>Heptagenia sulphurea</i>	000	+++	+00	000	+++	+++	000	00+	+++
30030204 <i>Heptagenia lateralis</i>	000	000	+00	000	000	000	000	000	+00
30030400 <i>Ecdyonurus</i> sp.	0++	+0+	+++	000	+++	0++	0+0	0++	0+0
30040101 <i>Leptophlebia marginata</i>	000	00+	000	+++	00+	000	000	000	000
30040102 <i>Leptophlebia vespertina</i>	000	000	000	+00	000	000	000	000	000
30050101 <i>Ephemerella ignita</i>	000	000	0+0	000	0+0	0+0	0+0	0+0	0+0
30080204 <i>Caenis horaria</i>	000	000	000	0++	000	000	000	000	000
30080205 <i>Caenis rivulorum</i>	000	00+	000	000	+++	+++	00+	000	0+0
31010301 <i>Brachyptera putata</i>	00+	00+	00+	000	00+	00+	000	000	000
31010302 <i>Brachyptera risi</i>	+00	+00	000	000	000	000	000	000	000
31020101 <i>Protonemura praecox</i>	000	000	00+	000	000	000	000	000	000
31020103 <i>Protonemura meyeri</i>	000	000	+00	000	00+	+0+	000	000	00+
31020202 <i>Amphinemura sulcicollis</i>	+00	+++	+++	000	+++	+++	+0+	+00	+++
31020401 <i>Nemoura cinerea</i>	000	000	000	+00	000	000	000	000	000
31020403 <i>Nemoura avicularis</i>	000	000	000	+0+	000	000	000	000	000
31020404 <i>Nemoura cambrica</i> group	+00	000	000	000	000	000	000	000	000
31030102 <i>Leuctra inermis</i>	+00	+00	+00	000	+00	000	000	000	+00
31030103 <i>Leuctra hippopus</i>	+0+	00+	+0+	000	00+	000	00+	000	000
31030105 <i>Leuctra fusca</i>	000	0+0	0+0	000	000	0++	0+0	0+0	0+0
31030106 <i>Leuctra noselyi</i>	000	000	000	000	000	000	000	000	0+0
31050201 <i>Perlodes microcephala</i>	00+	000	000	000	00+	00+	0++	00+	00+
31050301 <i>Diura bicaudata</i>	000	000	000	000	000	000	000	0+0	000
31050401 <i>Isoperla grammatica</i>	+0+	+++	+++	+00	+++	+++	+00	000	+++
31060101 <i>Dinocras cephalotes</i>	0+0	000	0++	000	000	000	000	000	0+0
31060201 <i>Perla bipunctata</i>	0+0	000	0++	000	+00	+00	0++	0+0	+++
31070101 <i>Chloroperla torrentium</i>	+00	+++	+0+	000	+++	000	000	00+	+00
31070102 <i>Chloroperla tripunctata</i>	+00	+00	0+0	000	000	000	+00	+00	+00
33110201 <i>Cynatia bonndorffi</i>	000	000	000	00+	000	000	000	000	000
33110803 <i>Sigara distincta</i>	000	000	000	0++	000	000	000	000	000
33110806 <i>Sigara fonsarum</i>	000	000	000	0++	000	000	000	000	000
33110807 <i>Sigara scotti</i>	000	000	000	0++	000	000	000	000	000
33110813 <i>Sigara venusta</i>	000	000	000	0++	000	000	000	000	000
35010311 <i>Haliphus fulvus</i>	000	000	000	00+	000	000	000	000	000
35030606 <i>Coelambus novemlineatus</i>	000	000	000	+00	000	000	000	000	000
35030703 <i>Potamonectes depressus</i>	000	000	000	00+	000	000	000	000	000
35030802 <i>Oreodytes sanmarkii</i>	000	000	000	0+0	0++	000	000	000	000
35030803 <i>Oreodytes septentrionalis</i>	000	0+0	000	000	000	000	0+0	0+0	+00
35031300 <i>Ilybius</i> sp.	000	000	000	00+	000	000	000	000	000
35040301 <i>Orectochilus villosus</i>	000	000	000	000	000	000	000	000	00+
35050207 <i>Hydraena gracilis</i>	0+0	000	000	000	000	000	000	000	000
35110101 <i>Elmis aenea</i>	000	+++	00+	000	+++	+++	+++	+00	+00
35110201 <i>Exolus parallelepipedus</i>	000	0+0	+++	000	+00	+00	+++	0+0	+++
35110301 <i>Limnius volckmari</i>	0++	+++	+++	000	+++	+++	+++	+00	+++

SITE x SPECIES MATRIX FOR THE RIVER SPEY. 1978-79. (CONT.)

SPECIES CODE AND NAME	01	03	05	07	09	11	13	15	17
35110603 <i>Oulimnius tuberculatus</i>	0++	+0+	000	000	+0+	00+	000	000	000
36010101 <i>Sialis lutaria</i>	000	00+	000	+++	000	000	000	000	000
38010100 <i>Rhyacophila</i> sp.	000	000	000	000	00+	000	0+0	000	000
38010101 <i>Rhyacophila dorsalis</i>	00+	0++	+++	0+0	+0+	+++	+0+	+0+	+++
38010104 <i>Rhyacophila munda</i>	000	000	000	000	0+0	000	000	000	000
38010200 <i>Glossosoma</i> sp.	000	000	00+	000	+0+	00+	+00	0++	00+
38010300 <i>Agapetus</i> sp.	000	000	0+0	000	+++	+++	+0+	+0+	+++
38030000 <i>Polycentropodidae</i>	000	000	000	000	000	000	000	000	00+
38030300 <i>Polycentropus</i> sp.	000	000	000	000	000	000	000	000	+00
38030301 <i>Polycentropus flavomaculatus</i>	0++	+0+	0+0	000	+++	0++	000	000	0+0
38030501 <i>Cyrnus trimaculatus</i>	0+0	000	000	000	000	000	000	000	000
38040201 <i>Tinodes waeneri</i>	000	000	000	00+	000	000	000	000	000
38040501 <i>Psychomyia pusilla</i>	000	0+0	000	000	0+0	0+0	000	000	0+0
38050101 <i>Hydropsyche pellucidula</i>	+++	+0+	+++	000	+0+	+0+	000	00+	+0+
38050104 <i>Hydropsyche contubernalis</i>	000	000	000	000	000	000	+00	0++	000
38050109 <i>Hydropsyche siltalai</i>	0+0	+0+	0+0	000	+++	0++	0+0	00+	0++
38060300 <i>Hydroptila</i> sp.	00+	00+	00+	00+	0+0	0+0	000	000	000
38060400 <i>Ithytrichia</i> sp.	000	000	000	000	00+	000	000	000	000
38060600 <i>Oxyethira</i> sp.	00+	000	000	000	000	000	000	000	000
38070201 <i>Phryganea grandis</i> group	000	000	000	00+	000	000	000	000	000
38080000 <i>Limnephilidae</i>	000	00+	000	000	000	000	000	000	00+
38080201 <i>Apatania wallengreni</i>	000	000	000	00+	000	000	000	000	000
38080401 <i>Ecclisopteryx guttulata</i>	000	000	000	000	000	000	00+	000	000
38080500 <i>Limnephilus</i> sp.	000	000	000	+0+	000	000	000	000	000
38080501 <i>Limnephilus rhombicus</i>	000	000	000	00+	000	000	000	000	000
38080525 <i>Limnephilus extricatus</i>	000	000	000	00+	000	000	000	000	000
38080526 <i>Limnephilus fuscicornis</i>	000	000	000	00+	000	000	000	000	000
38080901 <i>Anabolia nervosa</i>	000	000	000	+++	+00	000	000	000	000
38081100 <i>Potamophylax</i> group	000	000	000	00+	000	000	00+	000	000
38081200 <i>Baetis</i> sp.	000	000	0+0	000	+00	000	000	000	000
38120100 <i>Athripsodes</i> sp.	000	000	000	000	+00	000	000	000	000
38120107 <i>Athripsodes cinereus</i>	000	000	000	+++	000	000	000	000	000
38120108 <i>Athripsodes albifrons</i>	000	000	000	000	0++	0+0	+00	000	000
38120109 <i>Athripsodes bilineatus</i>	+0+	+0+	+0+	000	00+	000	000	000	000
38120110 <i>Athripsodes commutatus</i>	000	000	000	000	000	000	+0+	000	000
38120202 <i>Nystacides azurea</i>	000	000	000	0+0	000	000	000	000	000
38130101 <i>Goera pilosa</i>	000	000	000	000	00+	000	000	000	000
38140201 <i>Lepidostoma hirtum</i>	000	0++	0++	000	+++	+++	+00	000	00+
38150101 <i>Brachycentrus subnubilus</i>	000	00+	+0+	000	+00	+0+	+++	+++	+00
38160101 <i>Sericostoma personatus</i>	000	000	0++	0+0	0+0	0+0	0++	000	000
40010000 <i>Tipulidae</i>	0+0	000	000	000	000	000	000	000	000
40011731 <i>Tipula montium</i> group	00+	0+0	00+	00+	00+	000	0+0	0+0	000
40012501 <i>Antocha vitripennis</i>	000	000	000	000	0+0	000	000	000	000
40013500 <i>Dicranota</i> sp.	+0+	+00	00+	000	0++	+0+	+++	0+0	0+0
40014100 <i>Limnophila (Eloeophila)</i> sp.	000	000	+00	000	0++	+0+	000	000	000
40015700 <i>Hexatoma</i> sp.	+0+	+++	+++	000	0+0	+++	0++	0++	+0+
40060400 <i>Aedes (Ochlerotatus)</i> sp.	000	000	000	+00	000	000	000	000	000
40080000 <i>Ceratopogonidae</i>	000	000	000	+0+	0+0	000	00+	0+0	000
40090201 <i>Pspectrotanytus trifascipennis</i>	000	000	000	000	000	000	00+	000	000
40090300 <i>Macropelopia</i> sp.	000	000	000	0++	000	000	0+0	000	000
40090400 <i>Procladius</i> sp.	000	000	000	+++	000	000	000	000	000
40090501 <i>Pspectrotanytus varius</i>	000	000	000	+0+	000	000	000	000	000
40090800 <i>Ablabesmyia</i> sp.	000	000	000	0+0	000	000	000	000	000
40091500 <i>Natarsia</i> sp.	000	000	000	00+	000	000	000	000	000
40092000 <i>Thienemannimyia</i> group	0+0	0++	0++	+++	+++	0++	00+	000	0+0
40092300 <i>Zavrelimyia</i> group	000	0+0	000	+00	0++	000	00+	000	000
40110000 <i>Dianesinae</i>	000	000	000	000	000	000	000	000	0+0
40110200 <i>Dianesa</i> sp.	000	000	000	000	00+	000	000	000	000

SITE x SPECIES MATRIX FOR THE RIVER SPEY, 1978-79. (CONT.)

SPECIES CODE AND NAME	01	03	05	07	09	11	13	15	17
40110301 Potthastia gaedii group	0+0	0++	0+0	000	00+	000	0+0	000	000
40110302 Potthastia longimana group	0+0	00+	+0+	000	0+0	+++	000	000	++0
40130700 Eukiefferiella group	00+	+0+	+++	000	+++	+++	+++	00+	+++
40131100 Beterotriassocladius sp.	0+0	000	000	+00	000	000	000	000	000
40132400 Psectrocladius sp.	000	000	000	+0+	000	000	000	000	000
40132500 Rheocricotopus sp.	000	000	000	000	0+0	0+0	000	000	0+0
40132601 Synorthocladius semivirens	000	000	000	000	000	000	000	00+	000
40134700 Pseudomittia sp.	00+	000	000	000	000	000	000	000	000
40135100 Thienemanniella sp.	000	00+	000	000	000	000	000	000	000
40138000 Cricotopus group	0++	+++	+0	000	+++	+++	0+0	+0	+++
40300101 Procladius olivacea	000	000	000	0+0	000	000	0++	000	000
40310200 Chironomus sp.	000	000	000	+++	000	000	000	000	000
40310701 Demicryptochironomus vulneratus	0+0	000	000	000	0+0	000	000	000	0+0
40310900 Edochironomus sp.	000	000	000	+00	000	000	000	000	000
40311600 Dicotendipes sp.	000	000	000	+0+	000	000	000	000	000
40311700 Microtendipes sp.	000	00+	000	0++	+++	000	00+	000	000
40311901 Pagastiella orophila	000	000	000	+0+	000	000	000	000	000
40312300 Paratendipes sp.	000	000	000	0+0	000	000	000	000	000
40312400 Polypedilum sp.	000	000	0+0	00+	0+0	0+0	0+0	0+0	+0
40313000 Stictochironomus sp.	000	000	000	00+	000	00+	+++	000	000
40313101 Xenochironomus xenolabis	000	000	000	000	00+	000	000	000	000
40323300 Cladotanytarsus sp.	000	0+0	000	+0	0+0	000	0++	000	000
40328000 Micropsectra group	0++	0++	0+0	+++	+++	000	00+	0+0	+00
40328100 Paratanytarsus group	000	000	0+0	000	+++	0+0	0+0	0+0	+0
40150000 Simuliidae	000	000	000	000	000	000	000	+00	000
40150101 Prosimulium hirtipes	000	000	+00	000	000	+00	000	000	000
40150501 Simulium (Simulium) tuberosum	000	000	000	000	000	000	000	000	0+0
40150502 Simulium (Simulium) reptans group	000	000	+0	0+0	0++	0++	0+0	0+0	0++
40150508 Simulium (Simulium) argyreatum group	000	0++	00+	000	00+	+00	000	000	0+0
40150510 Simulium (Simulium) ornatum group	000	+0+	0+0	000	000	000	000	000	000
40170000 Empididae	000	0+0	000	000	000	000	000	000	000
40170300 Chelifera group	000	+00	000	000	+0	0+0	000	000	0+0
40171000 Wiedemannia group	+00	000	000	000	0+0	0+0	000	0+0	000
40190101 Atherix ibis	000	00+	0+0	000	00+	000	00+	000	000
40250000 Phaenicia group	000	000	+00	00+	000	000	000	000	000
40250200 Limnophora sp.	000	000	000	000	00+	000	000	000	000

COMBINED SEASON SITE SPECIES LISTS. RIVER SPEY. 1978-79.

R. Spey

Garva Bridge

13070107 *Lymnaea peregra* (Muller)
14030202 *Pisidium casertanum* (Poli)
16020000 Naididae
16020704 *Nais alpina* Sperber
16030601 *Rhyacodrilus coccineus* (Vejdovsky)
16040000 Enchytraeidae
16060201 *Stylodrilus heringianus* Claparede
16080000 Lumbricidae
30020105 *Baetis rhodani* (Pictet)
30030101 *Rhithrogena semicolorata* group
30030400 *Ecdyonurus* sp.
31010301 *Brachyptera putata* (Newman)
31010302 *Brachyptera risi* (Morton)
31020202 *Amphinemura sulcicollis* (Stephens)
31020404 *Nemoura cambrica* group
31030102 *Leuctra inermis* Kempny
31030103 *Leuctra hippopus* (Kempny)
31050201 *Perlodes microcephala* (Pictet)
31050401 *Isoperla grammatica* (Poda)
31060101 *Dinocras cephalotes* (Curtis)
31060201 *Perla bipunctata* Pictet
31070101 *Chloroperla torrentium* (Pictet)
31070102 *Chloroperla tripunctata* (Scopoli)
35050207 *Hydraena gracilis* Germar
35110301 *Limnius volckmari* (Panzer)
35110603 *Oulimnius tuberculatus* (Muller)
38010101 *Rhyacophila dorsalis* (Curtis)
38030301 *Polycentropus flavomaculatus* (Pictet)
38030501 *Cynurus trimaculatus* (Curtis)
38050101 *Hydropsyche pellucidula* (Curtis)
38050109 *Hydropsyche siltalai* Dohler
38060300 *Hydroptila* sp.
38060600 *Oxyethira* sp.
38120109 *Athripsodes bilineatus* (L.)
40010000 Tipulidae
40011731 *Tipula montium* group
40013500 *Dicranota* sp.
40015700 *Hexatoma* sp.
40092000 *Thienemannimyia* group
40110301 *Potthastia gaedii* group
40110302 *Potthastia longimana* group
40130700 *Eukiefferiella* group
40131100 *Heterotrissocladius* sp.
40134700 *Pseudosmittia* sp.
40138000 *Cricotopus* group
40310701 *Demicryptochironomus vulneratus* (Zetterstedt)
40328000 *Micropsectra* group
40171000 *Wiedemannia* group

COMBINED SEASON SITE SPECIES LISTS, RIVER SPEY, 1978-79.

R. Spey Laggan Bridge

13070107 *Lymnaea peregra* (Muller)
13100201 *Ancylus fluviatilis* Muller
14030000 Sphaeriidae
14030200 *Pisidium* sp.
14030202 *Pisidium casertanum* (Poli)
14030213 *Pisidium nitidum* Jenyns
16020704 *Nais alpina* Sperber
16020901 *Vejdovskyella comata* (Vejdovsky)
16030401 *Spirosperma ferox* (Eisen)
16030601 *Rhyacodrilus coccineus* (Vejdovsky)
16040000 Enchytraeidae
16060101 *Lumbriculus variegatus* (Muller)
16060201 *Stylodrilus heringianus* Claparede
16080000 Lumbricidae
30020105 *Baetis rhodani* (Pictet)
30020107 *Baetis muticus* (L.)
30020108 *Baetis niger* (L.)
30030101 *Rhithrogena semicolorata* group
30030201 *Heptagenia sulphurea* (Muller)
30030400 *Ecdyonurus* sp.
30040101 *Leptophlebia marginata* (L.)
30080205 *Caenis rivulorum* Eaton
31010301 *Brachyptera putata* (Newman)
31010302 *Brachyptera risi* (Morton)
31020202 *Amphinemura sulcicollis* (Stephens)
31030102 *Leuctra inermis* Kempny
31030103 *Leuctra hippopus* (Kempny)
31030105 *Leuctra fusca* (L.)
31050401 *Isoperla grammica* (Poda)
31070101 *Chloroperla torrentium* (Pictet)
31070102 *Chloroperla tripunctata* (Scopoli)
35030803 *Oreodytes septentrionalis* (Sahlberg)
35110101 *Elmis aenea* (Muller)
35110201 *Esolus parallelepipedus* (Muller)
35110301 *Limnius volckmari* (Panzer)
35110603 *Oulimnius tuberculatus* (Muller)
36010101 *Sialis lutaria* (L.)
38010101 *Rhyacophila dorsalis* (Curtis)
38030301 *Polycentropus flavomaculatus* (Pictet)
38040501 *Psychomyia pusilla* (Fabricius)
38050101 *Hydropsyche pellucidula* (Curtis)
38050109 *Hydropsyche siltalai* Dohler
38060300 *Hydroptila* sp.
38080000 Limnephilidae
38120109 *Athripsodes bilineatus* (L.)
38140201 *Lepidostoma hirtum* (Fabricius)
38150101 *Brachycentrus subnubilus* Curtis
40011731 *Tipula montium* group
40013500 *Dicranota* sp.
40015700 *Hexatoma* sp.
40092000 *Thienemannimyia* group
40092300 *Zavrelinyia* group
40110301 *Potthastia gaedii* group
40110302 *Potthastia longimana* group
40130700 *Eukiefferiella* group
40135100 *Thienemanniella* sp.
40138000 *Cricotopus* group
40311700 *Microtendipes* sp.
40323300 *Cladotanytarsus* sp.
40328000 *Micropsectra* group

COMBINED SEASON SITE SPECIES LISTS. RIVER SPEY. 1978-79.

R. Spey Laggan Bridge (cont.)

40150508 Simulium (Simulium) argyreatum group

40150510 Simulium (Simulium) ornatum group

40170000 Empididae

40170300 Chelifera group

40190101 Atherix ibis (Fabricius)

COMBINED SEASON SITE SPECIES LISTS. RIVER SPEY. 1978-79.

R. Spey Newtonmore

14030200 *Pisidium* sp.
 16020704 *Nais alpina* Sperber
 16030000 Tubificidae
 16040000 Enchytraeidae
 16060101 *Lumbriculus variegatus* (Muller)
 16060201 *Stylodrilus heringianus* Claparede
 16080000 Lumbricidae
 19110204 *Lebertia* (*Pilolebertia*) *inaequalis* (Koch)
 30020102 *Baetis scambus* group
 30020105 *Baetis rhodani* (Pictet)
 30020107 *Baetis muticus* (L.)
 30030101 *Rhithrogena semicolorata* group
 30030201 *Heptagenia sulphurea* (Muller)
 30030204 *Heptagenia lateralis* (Curtis)
 30030400 *Ecdyonurus* sp.
 30050101 *Ephemerella ignita* (Poda)
 31010301 *Brachyptera putata* (Newman)
 31020101 *Protonemura praecox* (Morton)
 31020103 *Protonemura meyeri* (Pictet)
 31020202 *Amphinemura sulcicollis* (Stephens)
 31030102 *Leuctra inermis* Kempny
 31030103 *Leuctra hippopus* (Kempny)
 31030105 *Leuctra fusca* (L.)
 31050401 *Isoperla grammatica* (Poda)
 31060101 *Dinocras cephalotes* (Curtis)
 31060201 *Perla bipunctata* Pictet
 31070101 *Chloroperla torrentium* (Pictet)
 31070102 *Chloroperla tripunctata* (Scopoli)
 35110101 *Elmis aenea* (Muller)
 35110201 *Esolus parallelepipedus* (Muller)
 35110301 *Limnius volckmari* (Panzer)
 38010101 *Rhyacophila dorsalis* (Curtis)
 38010200 *Glossosoma* sp.
 38010300 *Agapetus* sp.
 38030301 *Polycentropus flavomaculatus* (Pictet)
 38050101 *Hydropsyche pellucidula* (Curtis)
 38050109 *Hydropsyche siltalai* Dohler
 38060300 *Hydroptila* sp.
 38081200 *Halesus* sp.
 38120109 *Athripsodes bilineatus* (L.)
 38140201 *Lepidostoma hirtum* (Fabricius)
 38150101 *Brachycentrus subnubilus* Curtis
 38160101 *Sericostoma personatum* (Spence)
 40011731 *Tipula montium* group
 40013500 *Dicranota* sp.
 40014100 *Limnophila* (*Elocophila*) sp.
 40015700 *Hexatoma* sp.
 40092000 *Thienemannimyia* group
 40110301 *Potthastia gaedii* group
 40110302 *Potthastia longimana* group
 40130700 *Eukiefferiella* group
 40138000 *Cricotopus* group
 40312400 *Polypedilum* sp.
 40328000 *Micropsectra* group
 40328100 *Paratanytarsus* group
 40150101 *Prosimulium hirtipes* Fries
 40150502 *Simulium* (*Simulium*) *reptans* group
 40150508 *Simulium* (*Simulium*) *argyreatum* group
 40150510 *Simulium* (*Simulium*) *ornatum* group
 40190101 *Atherix ibis* (Fabricius)
 40250000 Muscidae

COMBINED SEASON SITE SPECIES LISTS. RIVER SPEY. 1978-79.

40070100 R. Spey

Kincraig

14030200 *Pisidium* sp.
14030206 *Pisidium milium* Held
14030208 *Pisidium subtruncatum* Malm
14030213 *Pisidium nitidum* Jenyns
16020401 *Specaria josinae* (Vejdovsky)
16020601 *Ophidonais serpentina* (Muller)
16020701 *Nais communis* group
16020703 *Nais simplex* group
16020901 *Vejdovskyella comata* (Vejdovsky)
16021201 *Stylaria lacustris* (L.)
16030103 *Tubifex ignotus* (Stolc)
16030302 *Limnodrilus hoffmeisteri* Claparede
16031101 *Aulodrilus pluriseta* (Piguet)
16040000 *Enchytraeidae*
16060101 *Lumbriculus variegatus* (Muller)
16060201 *Stylodrilus heringianus* Claparede
17020302 *Glossiphonia complanata* (L.)
17020501 *Helobdella stagnalis* (L.)
19040105 *Eylais discreta* Koenike
19110209 *Lebertia* (*Pilolebertia*) *porosa*? Thor
19240213 *Arrenurus* (*Megaluracarus*) *securiformis* Piersig
30010102 *Siphonurus lacustris* Eaton
30020201 *Centroptilum luteolum* (Muller)
30020302 *Cloeon simile* Eaton
30040101 *Leptophlebia marginata* (L.)
30040102 *Leptophlebia vespertina* (L.)
30080204 *Caenis horaria* (L.)
31020401 *Nemoura cinerea* (Retzius)
31020403 *Nemoura avicularis* Morton
31050401 *Isoperla grammatica* (Poda)
33110201 *Cymatia bonndorffi* (Sahlberg)
33110803 *Sigara distincta* (Fieber)
33110806 *Sigara fossarum* (Leach)
33110807 *Sigara scotti* (Fieber)
33110813 *Sigara venusta* (Douglas & Scott)
35010311 *Haliphus fulvus* (Fabricius)
35030606 *Coelambus novemlineatus* (Stephens)
35030703 *Potamonectes depressus* (Fabricius)
35030802 *Oreodytes sanmarkii* (Sahlberg)
35031300 *Ilybius* sp.
36010101 *Sialis lutaria* (L.)
38010101 *Rhyacophila dorsalis* (Curtis)
38040201 *Tinodes waeneri* (L.)
38060300 *Hydroptila* sp.
38070201 *Phryganea grandis* group
38080201 *Apatania wallengreni* McLachlan
38080500 *Limnephilus* sp.
38080501 *Limnephilus rhombicus* (L.)
38080525 *Limnephilus extricatus* McLachlan
38080526 *Limnephilus fuscicornis* (Rambur)
38080901 *Anabolia nervosa* (Curtis)
38081100 *Potamophylax* group
38120107 *Athripsodes cinereus* (Curtis)
38120202 *Mystacides azurea* (L.)
38160101 *Sericostoma personatum* (Spence)
40011731 *Tipula montium* group
40060400 *Aedes* (*Ochlerotatus*) sp.
40080000 *Ceratopogonidae*

COMBINED SEASON SITE SPECIES LISTS. RIVER SPEY. 1978-79.

40070100 R.Spey Kincaig (cont.)

40090300 *Macropelopia* sp.
40090400 *Procladius* sp.
40090501 *Psectrotanypus varius* (Fabricius)
40090800 *Ablabesmyia* sp.
40091500 *Natarsia* sp.
40092000 *Thienemannimyia* group
40092300 *Zavrelimyia* group
40131100 *Heterotrissocladius* sp.
40132400 *Psectrocladius* sp.
40300101 *Procladius olivacea* (Meigen)
40310200 *Chironomus* sp.
40310900 *Endochironomus* sp.
40311600 *Dicrotendipes* sp.
40311700 *Microtendipes* sp.
40311901 *Pagastiella orophila* (Edwards)
40312300 *Paratendipes* sp.
40312400 *Polypedilum* sp.
40313000 *Stictochironomus* sp.
40323300 *Cladotanytarsus* sp.
40328000 *Micropsectra* group
40150502 *Simulium* (*Simulium*) *reptans* group
40250000 *Muscidae*

COMBINED SEASON SITE SPECIES LISTS. RIVER SPEY. 1978-79.

R. Spey Boat of Garten

03120203 Polycelis felina (Dalyell)
 13070107 Lymnaea peregra (Muller)
 13100201 Ancyclus fluviatilis Muller
 14030200 Pisidium sp.
 14030202 Pisidium casertanum (Poli)
 14030214 Pisidium pulchellum Jenyns
 16020701 Nais communis group
 16020704 Nais alpina Sperber
 16020710 Nais pardalis Piguët
 16030103 Tubifex ignotus (Stolc)
 16030401 Spirosperma ferox (Eisen)
 16031101 Aulodrilus plurisetæ (Piguët)
 16040000 Enchytraeidae
 16060101 Lumbriculus variegatus (Muller)
 16060201 Stylodrilus heringianus Claparede
 16080000 Lumbricidae
 19110209 Lebertia (Pilolebertia) porosa? Thor
 19140307 Atractides (Atractides) nodipalpis (Thor)
 30020102 Baetis scambus group
 30020103 Baetis vernus Curtis
 30020105 Baetis rhodani (Pictet)
 30020107 Baetis muticus (L.)
 30020201 Centroptilum luteolum (Muller)
 30030101 Rhithrogena semicolorata group
 30030201 Heptagenia sulphurea (Muller)
 30030400 Ecdyonurus sp.
 30040101 Leptophlebia marginata (L.)
 30050101 Ephemerella ignita (Poda)
 30080205 Caenis rivulorum Eaton
 31010301 Brachyptera putata (Newman)
 31020103 Protonemura meyeri (Pictet)
 31020202 Amphinemura sulcicollis (Stephens)
 31030102 Leuctra inermis Kempny
 31030103 Leuctra hippopus (Kempny)
 31050201 Perlodes microcephala (Pictet)
 31050401 Isoperla grammatica (Poda)
 31060201 Perla bipunctata Pictet
 31070101 Chloroperla torrentium (Pictet)
 35030802 Oreodytes sanmarkii (Sahlberg)
 35110101 Elmia aenea (Muller)
 35110201 Esolus parallelepipedus (Muller)
 35110301 Limnius volckmari (Panzer)
 35110603 Oulimnius tuberculatus (Muller)
 38010100 Rhyacophila sp.
 38010101 Rhyacophila dorsalis (Curtis)
 38010104 Rhyacophila munda McLachlan
 38010200 Glossosoma sp.
 38010300 Agapetus sp.
 38030301 Polycentropus flavomaculatus (Pictet)
 38040501 Psychomyia pusilla (Fabricius)
 38050101 Hydropsyche pellucidula (Curtis)
 38050109 Hydropsyche siltalai Dohler
 38060300 Hydroptila sp.
 38060400 Ithytrichia sp.
 38080901 Anabolia nervosa (Curtis)
 38081200 Halesus sp.

COMBINED SEASON SITE SPECIES LISTS. RIVER SPEY. 1978-79.

R.Spey Boat of Garten (cont.)

38120100 *Athripsodes* sp.
38120108 *Athripsodes albifrons* (L.)
38120109 *Athripsodes bilineatus* (L.)
38130101 *Goera pilosa* (Fabricius)
38140201 *Lepidostoma hirtum* (Fabricius)
38150101 *Brachycentrus subnubilus* Curtis
38160101 *Sericostoma personatum* (Spence)
40011731 *Tipula montium* group
40012501 *Antocha vitripennis* Meigen
40013500 *Dicranota* sp.
40014100 *Limnophila* (*Eloeophila*) sp.
40015700 *Hexatoma* sp.
40080000 *Ceratopogonidae*
40092000 *Thienemannimyia* group
40092300 *Zavrelimyia* group
40110200 *Diamesa* sp.
40110301 *Potthastia gaedii* group
40110302 *Potthastia longimana* group
40130700 *Eukiefferiella* group
40132500 *Rheocricotopus* sp.
40138000 *Cricotopus* group
40310701 *Demicryptochironomus vulneratus* (Zetterstedt)
40311700 *Microtendipes* sp.
40312400 *Polypedilum* sp.
40313101 *Xenochironomus xenolabis* (Kieffer)
40323300 *Cladotanytarsus* sp.
40328000 *Micropsectra* group
40328100 *Paratanytarsus* group
40150502 *Simulium* (*Simulium*) *reptans* group
40150508 *Simulium* (*Simulium*) *argyreatum* group
40170300 *Chelifera* group
40171000 *Wiedemannia* group
40190101 *Atherix ibis* (Fabricius)
40250200 *Limnophora* sp.

COMBINED SEASON SITE SPECIES LISTS. RIVER SPEY. 1978-79.

R. Spey

Grantown

03120203 Polycelis felina (Dalyell)
13070107 Lymnaea peregra (Muller)
13100201 Ancyclus fluviatilis Muller
14030200 Pisidium sp.
16020704 Nais alpina Sperber
16020710 Nais pardalis Piguët
16030401 Spirosperma ferox (Eisen)
16040000 Enchytraeidae
16060101 Lumbriculus variegatus (Muller)
16060201 Stylodrilus heringianus Claparede
16080000 Lumbricidae
17020302 Glossiphonia complanata (L.)
30020102 Baetis scambus group
30020103 Baetis vernus Curtis
30020105 Baetis rhodani (Pictet)
30020107 Baetis muticus (L.)
30030101 Rhithrogena semicolorata group
30030201 Heptagenia sulphurea (Muller)
30030400 Ecdyonurus sp.
30050101 Ephemerella ignita (Poda)
30080205 Caenis rivulorum Eaton
31010301 Brachyptera putata (Newman)
31020103 Protonemura meyeri (Pictet)
31020202 Amphinemura sulcicollis (Stephens)
31030105 Leuctra fusca (L.)
31050201 Perlodes microcephala (Pictet)
31050401 Isoperla grammatica (Poda)
31060201 Perla bipunctata Pictet
35110101 Elmia aenea (Muller)
35110201 Esolus parallelepipedus (Muller)
35110301 Limnius volckmari (Panzer)
35110603 Oulimnius tuberculatus (Muller)
38010101 Rhyacophila dorsalis (Curtis)
38010200 Glossosoma sp.
38010300 Agapetus sp.
38030301 Polycentropus flavomaculatus (Pictet)
38040501 Psychomyia pusilla (Fabricius)
38050101 Hydropsyche pellucidula (Curtis)
38050109 Hydropsyche siltalai Dohler
38060300 Hydroptila sp.
38120108 Athripsodes albifrons (L.)
38140201 Lepidostoma hirtum (Fabricius)
38150101 Brachycentrus subnubilus Curtis
38160101 Sericostoma personatum (Spence)
40013500 Dicranota sp.
40014100 Limnophila (Eloeophila) sp.
40015700 Hexatoma sp.
40092000 Thienemannimyia group
40110302 Potthastia longimana group
40130700 Eukiefferiella group
40132500 Rheocricotopus sp.
40138000 Cricotopus group
40312400 Polypedilum sp.
40313000 Stictochironomus sp.
40328100 Paratanytarsus group
40150101 Prosimulium hirtipes Fries
40150502 Simulium (Simulium) reptans group
40150508 Simulium (Simulium) argyreatum group
40170300 Chelifera group
40171000 Wiedemannia group

COMBINED SEASON SITE SPECIES LISTS. RIVER SPEY, 1978-79.

R. Spey

Marypark

03120203 Polycelis felina (Dalyell)
 13040301 Potamopyrgus jenkinsi (Smith)
 13070107 Lymnaea peregra (Muller)
 14030200 Pisidium sp.
 16020501 Uncinatis uncinata (Orsted)
 16020701 Nais communis group
 16020704 Nais alpina Sperber
 16020707 Nais elinguis Muller
 16021602 Pristina idrensis group
 16030302 Limnodrilus hoffmeisteri Claparede
 16030601 Rhyacodrilus coccineus (Vejdovsky)
 16031101 Aulodrilus pluriseta (Piguet)
 16040000 Enchytraeidae
 16060101 Lumbriculus variegatus (Muller)
 16060201 Stylodrilus heringianus Claparede
 19080201 Sperchon brevirostris Koenike
 30010201 Ameletus inopinatus Eaton
 30020102 Baetis scambus group
 30020105 Baetis rhodani (Pictet)
 30020107 Baetis muticus (L.)
 30030101 Rhithrogena semicolorata group
 30030400 Ecdyonurus sp.
 30050101 Ephemerella ignita (Poda)
 30080205 Caenis rivulorum Eaton
 31020202 Amphinemura sulcicollis (Stephens)
 31030103 Leuctra hippopus (Kempny)
 31030105 Leuctra fusca (L.)
 31050201 Perlodes microcephala (Pictet)
 31050401 Isoperla grammatica (Poda)
 31060201 Perla bipunctata Pictet
 31070102 Chloroperla tripunctata (Scopoli)
 35030803 Oreodytes septentrionalis (Sahlberg)
 35110101 Elmia aenea (Muller)
 35110201 Esolus parallelepipedus (Muller)
 35110301 Limnius volckmari (Panzer)
 38010100 Rhyacophila sp.
 38010101 Rhyacophila dorsalis (Curtis)
 38010200 Glossosoma sp.
 38010300 Agapetus sp.
 38050104 Hydropsyche contubernalis McLachlan
 38050109 Hydropsyche siltalai Dohler
 38080401 Ecclisopteryx guttulata (Pictet)
 38081100 Potamophylax group
 38120108 Athripsodes albifrons (L.)
 38120110 Athripsodes commutatus (Rostock)
 38140201 Lepidostoma hirtum (Fabricius)
 38150101 Brachycentrus subnubilus Curtis
 38160101 Sericostoma personatum (Spence)
 40011731 Tipula montium group
 40013500 Dicranota sp.
 40015700 Hexatoma sp.
 40080000 Ceratopogonidae

COMBINED SEASON SITE SPECIES LISTS. RIVER SPEY. 1978-79.

R.Spey Marypark (cont.)

40090201 *Apsectrotanypus trifascipennis* (Zetterstedt)
40090300 *Macropelopia* sp.
40092000 *Thienemannimyia* group
40092300 *Zavrelimyia* group
40110301 *Potthastia gaedii* group
40130700 *Eukiefferiella* group
40138000 *Cricotopus* group
40300101 *Prodiamesa olivacea* (Meigen)
40311700 *Microtendipes* sp.
40312400 *Polypedilum* sp.
40313000 *Stictochironomus* sp.
40323300 *Cladotanytarsus* sp.
40328000 *Micropsectra* group
40328100 *Paratanytarsus* group
40150502 *Simulium* (*Simulium*) *reptans* group
40190101 *Atherix ibis* (Fabricius)

COMBINED SEASON SITE SPECIES LISTS. RIVER SPEY. 1978-79.

R. Spey

Craigellachie

16020701 *Nais communis* group
16020704 *Nais alpina* Sperber
16030000 Tubificidae
16030401 *Spirosperma ferox* (Eisen)
16030601 *Rhyacodrilus coccineus* (Vejdovsky)
16031101 *Aulodrilus pluriseta* (Piguet)
16040000 Enchytraeidae
16060201 *Stylodrilus heringianus* Claparede
19110209 *Lebertia* (*Pilolebertia*) *porosa*? Thor
30020105 *Baetis rhodani* (Pictet)
30020107 *Baetis muticus* (L.)
30030101 *Rhithrogena semicolorata* group
30030201 *Heptagenia sulphurea* (Muller)
30030400 *Ecdyonurus* sp.
30050101 *Ephemerella ignita* (Poda)
31020202 *Amphinemura sulcicollis* (Stephens)
31030105 *Leuctra fusca* (L.)
31050201 *Perlodes microcephala* (Pictet)
31050301 *Diura bicaudata* (L.)
31060201 *Perla bipunctata* Pictet
31070101 *Chloroperla torrentium* (Pictet)
31070102 *Chloroperla tripunctata* (Scopoli)
35030803 *Oreodytes septentrionalis* (Sahlberg)
35110101 *Elmis aenea* (Muller)
35110201 *Esolus parallelepipedus* (Muller)
35110301 *Limnius volckmari* (Panzer)
38010101 *Rhyacophila dorsalis* (Curtis)
38010200 *Glossosoma* sp.
38010300 *Agapetus* sp.
38050101 *Hydropsyche pellucidula* (Curtis)
38050104 *Hydropsyche contubernalis* McLachlan
38050109 *Hydropsyche siltalai* Dohler
38150101 *Brachycentrus subnubilus* Curtis
40011731 *Tipula montium* group
40013500 *Dicranota* sp.
40015700 *Hexatoma* sp.
40080000 Ceratopogonidae
40130700 *Eukiefferiella* group
40132601 *Synorthocladus semivirens* (Kieffer)
40138000 *Cricotopus* group
40312400 *Polypedilum* sp.
40328000 *Micropsectra* group
40328100 *Paratanytarsus* group
40150000 Simuliidae
40150502 *Simulium* (*Simulium*) *reptans* group
40171000 *Wiedemannia* group

COMBINED SEASON SITE SPECIES LISTS. RIVER SPEY. 1978-79.

R. Spey Garmouth

03120203 Polycelis felina (Dalyell)
 13070107 Lymnaea peregra (Muller)
 13100201 Ancyclus fluviatilis Muller
 16020701 Nais communis group
 16020704 Nais alpina Sperber
 16021602 Pristina idrensis group
 16040000 Enchytraeidae
 16060201 Stylodrilus heringianus Claparede
 16080000 Lumbricidae
 19080201 Sperchon brevirostris Koenike
 19080204 Sperchon glandulosus Koenike
 19140307 Atractides (Atractides) nodipalpis (Thor)
 30020102 Baetis scambus group
 30020105 Baetis rhodani (Pictet)
 30020107 Baetis muticus (L.)
 30030101 Rhithrogena semicolorata group
 30030201 Heptagenia sulphurea (Muller)
 30030204 Heptagenia lateralis (Curtis)
 30030400 Ecdyonurus sp.
 30050101 Ephemerella ignita (Poda)
 30080205 Caenis rivulorum Eaton
 31020103 Protonemura meyeri (Pictet)
 31020202 Amphinemura sulcicollis (Stephens)
 31030102 Leuctra inermis Kempny
 31030105 Leuctra fusca (L.)
 31030106 Leuctra moselyi Morton
 31050201 Perlodes microcephala (Pictet)
 31050401 Isoperla grammatica (Poda)
 31060101 Dinocras cephalotes (Curtis)
 31060201 Perla bipunctata Pictet
 31070101 Chloroperla torrentium (Pictet)
 31070102 Chloroperla tripunctata (Scopoli)
 35030803 Oreodytes septentrionalis (Sahlberg)
 35040301 Orectochilus villosus (Muller)
 35110101 Elmia aenea (Muller)
 35110201 Esolus parallelepipedus (Muller)
 35110301 Limnius volckmari (Panzer)
 38010101 Rhyacophila dorsalis (Curtis)
 38010200 Glossosoma sp.
 38010300 Agapetus sp.
 38030000 Polycentropodidae
 38030300 Polycentropus sp.
 38030301 Polycentropus flavomaculatus (Pictet)
 38040501 Psychomyia pusilla (Fabricius)
 38050101 Hydropsyche pellucidula (Curtis)
 38050109 Hydropsyche siltalai Dohler
 38080000 Limnephilidae
 38140201 Lepidostoma hirtum (Fabricius)
 38150101 Brachycentrus subnubilus Curtis
 40013500 Dicranota sp.
 40015700 Hexatoma sp.

COMBINED SEASON SITE SPECIES LISTS. RIVER SPEY. 1978-79.

R. Spey Garmouth (cont.)

40092000 Thienemannimyia group
40110000 Diamesinae
40110302 Potthastia longimana group
40130700 Eukiefferiella group
40132500 Rheocricotopus sp.
40138000 Cricotopus group
40310701 Demicryptochironomus vulneratus (Zetterstedt)
40312400 Polypedilum sp.
40328000 Micropsectra group
40328100 Paratanytarsus group
40150501 Simulium (Simulium) tuberosum Lundstrom
40150502 Simulium (Simulium) reptans group
40150508 Simulium (Simulium) argyreatum group
40170300 Chelifera group

BIOLOGICAL MONITORING WORKING PARTY INDICES. RIVER SPEY, 1978-79.SPRING

		SCORE	TAXA	ASPT
R. Spey	Garva Bridge	85	12	7.08
R. Spey	Laggan Bridge	104	16	6.50
R. Spey	Newtonmore	101	15	6.73
R. Spey	Kincraig	73	12	6.08
R. Spey	Boat of Garten	149	22	6.77
R. Spey	Grantown	110	18	6.11
R. Spey	Marypark	106	15	7.07
R. Spey	Craigellachie	61	10	6.10
R. Spey	Garmouth	108	16	6.75

SUMMER

		SCORE	TAXA	ASPT
R. Spey	Garva Bridge	60	10	6.00
R. Spey	Laggan Bridge	112	17	6.59
R. Spey	Newtonmore	135	19	7.11
R. Spey	Kincraig	83	15	5.53
R. Spey	Boat of Garten	165	25	6.60
R. Spey	Grantown	163	24	6.79
R. Spey	Marypark	127	19	6.68
R. Spey	Craigellachie	99	15	6.60
R. Spey	Garmouth	137	21	6.52

AUTUMN

		SCORE	TAXA	ASPT
R. Spey	Garva Bridge	95	15	6.33
R. Spey	Laggan Bridge	164	25	6.56
R. Spey	Newtonmore	150	21	7.14
R. Spey	Kincraig	102	18	5.67
R. Spey	Boat of Garten	173	26	6.65
R. Spey	Grantown	132	21	6.29
R. Spey	Marypark	111	17	6.53
R. Spey	Craigellachie	64	10	6.40
R. Spey	Garmouth	95	15	6.33

THREE SEASONS COMBINED

		SCORE	TAXA	ASPT
R. Spey	Garva Bridge	130	20	6.50
R. Spey	Laggan Bridge	187	28	6.68
R. Spey	Newtonmore	174	24	7.25
R. Spey	Kincraig	144	23	6.26
R. Spey	Boat of Garten	228	32	7.13
R. Spey	Grantown	189	28	6.75
R. Spey	Marypark	184	27	6.81
R. Spey	Craigellachie	116	17	6.82
R. Spey	Garmouth	174	26	6.69



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